

ABSTRACT

Raw milk can be an excellent growth medium for different food-borne pathogens, including *Salmonella* spp. and *E. coli*. The main objective of the present study was to determine the Total Viable count (TVC) and to examine the prevalence of *Salmonella* spp., *E. coli* and coliform bacteria in raw cow milk. Also determined the occurrence of ESBL's in the samples. A total of 212 samples of raw cow's milk were collected from all dairy farms in Cyprus and examined. Of the 212 samples, 21% were positive for *Salmonella* spp., 35.4% for *E. coli* and 57.1% for coliform bacteria. *Salmonella* was identified based on the serotype and molecular, where 21 and 7 samples were positive, respectively. This study is the first documented reference in Cyprus that controls the prevalence of *Salmonella* spp., *E. coli* and coliform bacteria in raw milk, revealing a low prevalence for *Salmonella* spp. These data will help to assess the microbiological composition of raw milk and to establish rules to improve the hygiene of dairy farms.

Keywords: prevalence, *Salmonella* spp., *E. coli*, coliforms.